

In the Claims

Please amend claim 33 as follows:

B2 33. (Amended) A method of measuring inductance or inductive reactance of a sample comprising the steps of: (a) providing an instrument for measuring the inductance or the inductive reactance of the sample; (b) subjecting a portion of the instrument to different temperatures and recording data corresponding to the performance of the instrument portion at each temperature; (c) measuring the inductance or the inductive reactance of the sample using the instrument; and (d) correcting said measurement of inductance or inductive reactance for temperature based on the performance data.

Please add new claims 37-49, which read as follows:

B3 37. (New) A method as set forth in claim 33, wherein said step of providing an instrument comprises the step of providing a solenoid coil which defines the instrument portion and a meter for directly reading coil inductance.

38. (New) A method as set forth in claim 37, wherein said subjecting step comprises the steps of:

determining the inductance of the solenoid coil without a sample at each of the different temperatures; and

recording the inductance of the coil at each temperature.

39. (New) A method as set forth in claim 38, wherein said measuring step comprises the steps of:

placing the sample within the coil; and

measuring the inductance of the coil containing the sample.

40. (New) A method as set forth in claim 39, wherein said correcting step comprises the steps of:

measuring the temperature of the coil containing the sample; and
subtracting the inductance of the coil without a sample at a temperature corresponding to the measured temperature from the measured inductance of the coil containing the sample.

41. (New) A method as set forth in claim 40, wherein said coil is capable of at least a 3.7 % change in inductance upon receiving the sample.

42. (New) A method as set forth in claim 40, wherein said coil is capable of at least a 11.1 % change in inductance upon receiving the sample.

43. (New) A method of measuring inductance of a sample comprising the steps of: (a) providing an instrument for measuring the inductance of the sample; (b) subjecting the instrument to different temperatures and recording data corresponding to the performance of the instrument at each temperature; (c) measuring the inductance of the sample; and (d) correcting said measurement of inductance for temperature based on the performance data.

44. (New) A method as set forth in claim 43, wherein said step of providing an instrument comprises the step of providing a solenoid coil and a meter for directly reading coil inductance.

45. (New) A method as set forth in claim 44, wherein said subjecting step comprises the steps of:

determining the inductance of the solenoid coil without a sample at each of the different temperatures; and
recording the inductance of the coil at each temperature.